

IN THE CLAIMS:

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (Currently amended) A method comprising:
creating ~~[[a]]~~ an electronic message having a recipient at an address on a server,
~~wherein~~ wherein the electronic message ~~identifies~~ includes at least one delivery attribute
identifier for identifying at least one delivery attribute;
sending the electronic message to the recipient; and
receiving a response, the response including validity information indicating
whether the address is a valid address, and at least one delivery attribute value
corresponding to the at least one delivery attribute, the at least one delivery attribute
value including delivery information regarding the electronic message.
2. (Currently amended) The method of claim 1, wherein the at least one delivery
attribute identifier comprises at least one of a recipient mail system identifier, a recipient
mail server identifier, a recipient router identifier, a sender mail system identifier, a
sender mail server identifier, and a sender router identifier.
3. (Currently amended) The method of claim 1, wherein the validity information
indicates that the address is an invalid address, the method further comprising:
processing the at least one delivery attribute value to form delivery failure
analysis information; and
presenting the delivery failure analysis information.
4. (Currently amended) The method of claim ~~[[1]]~~ 3, wherein the at least one
delivery attribute value ~~including~~ includes an address, the address ~~[[being]]~~ comprising
one of a recipient mail system address, a recipient mail server address, a recipient router

address, a sender mail system address, a sender mail server address, and a sender router address.

5. (Original) The method of claim 4, wherein the step of processing the at least one delivery attribute value comprises pinging the address.

6. (Original) The method of claim 4, wherein the step of processing the at least one delivery attribute value comprises performing a simple network monitoring query for the address.

7. (Currently amended) The method of claim 1, further comprising:
storing the at least one delivery attribute value in a storage.

8. (Original) The method of claim 7, wherein the storage is a database.

9. (Original) The method of claim 1, wherein the method is performed by a client.

10. (Original) The method of claim 1, wherein the method is performed by a server.

11. (Currently amended) A method comprising:
receiving an electronic message having a recipient at an address on a server;
identifying at least one ~~deliver~~ delivery attribute identifier in the electronic message for identifying at least one delivery attribute; and
generating a response, the response including validity information indicating whether the address is a valid address, and at least one delivery attribute value corresponding to the at least one delivery attribute, the at least one delivery attribute value including delivery information regarding the electronic message.

12. (Currently amended) The method of claim 11, wherein the at least one delivery attribute identifier comprises at least one of a recipient mail system identifier, a recipient

mail server identifier, a recipient router identifier, a sender mail system identifier, a sender mail server identifier, and a sender router identifier.

13. (Original) The method of claim 11, wherein the step of generating a response comprises discovering the at least one delivery attribute value.

14. (Original) The method of claim 11, wherein the method is performed by a server.

15. (Currently amended) An apparatus comprising:

creation means for creating ~~[[a]]~~ an electronic message having a recipient at an address on a server, wherein the electronic message includes at least one delivery attribute identifier for identifying ~~identifies~~ at least one delivery attribute;

sending means for sending the electronic message to the recipient; and

receipt means for receiving a response, the response including validity information indicating whether the address is a valid address, and at least one delivery attribute value corresponding to the at least one delivery attribute, the at least one delivery attribute value including delivery information regarding the electronic message.

16. (Currently amended) The apparatus of claim 15, wherein the at least one delivery attribute identifier comprises at least one of a recipient mail system identifier, a recipient mail server identifier, a recipient router identifier, a sender mail system identifier, a sender mail server identifier, and a sender router identifier.

17. (Currently amended) The apparatus of claim 15, wherein the validity information indicates that the address is an invalid address, the apparatus further comprising:

processing means for processing the at least one delivery attribute value to form delivery failure analysis information; and

presentation means for presenting the delivery failure analysis information.

18. (Currently amended) The apparatus of claim ~~[[15]]~~ 17, wherein the at least one delivery attribute value ~~including~~ includes an address, the address being one of a recipient

mail system address, a recipient mail server address, a recipient router address, a sender mail system address, a sender mail server address, and a sender router address.

19. (Original) The apparatus of claim 18, wherein the processing means comprises means for pinging the address.

20. (Original) The apparatus of claim 18, wherein the processing means comprises means for performing a simple network monitoring query for the address.

21. (Currently amended) The apparatus of claim 15, further comprising:
storage means for storing the at least one delivery attribute value.

22. (Original) The apparatus of claim 21, wherein the storage means comprises a database.

23. (Original) The apparatus of claim 15, wherein the apparatus is embodied in a client computer.

24. (Original) The apparatus of claim 15, wherein the apparatus is embodied in a server computer.

25. (Currently amended) An apparatus comprising:
receipt means for receiving an electronic message having a recipient at an address on a server;

identification means for identifying at least one ~~deliver~~ delivery attribute identifier in the electronic message for identifying at least one delivery attribute; and

generation means for generating a response, the response including validity information indicating whether the address is a valid address, and at least one delivery attribute value corresponding to the at least one delivery attribute, the at least one delivery attribute value including delivery information regarding the electronic message.

26. (Currently amended) The apparatus of claim 25, wherein the at least one delivery attribute identifier comprises at least one of a recipient mail system identifier, a recipient mail server identifier, a recipient router identifier, a sender mail system identifier, a sender mail server identifier, and a sender router identifier.

27. (Original) The apparatus of claim 25, wherein the generation means comprises means for discovering the at least one delivery attribute value.

28. (Original) The apparatus of claim 25, wherein the apparatus is embodied in a server computer.

29. (Currently amended) A computer program product, in a computer readable medium, comprising:

instructions for creating ~~[[a]]~~ an electronic message having a recipient at an address on a server, wherein the electronic message includes at least one delivery attribute identifier for identifying ~~identifies~~ at least one delivery attribute;

instructions for sending the electronic message to the recipient; and

instructions for receiving a response, the response including validity information indicating whether the address is a valid address, and at least one delivery attribute value corresponding to the at least one delivery attribute, the at least one delivery attribute value including delivery information regarding the electronic message.

30. (Currently amended) A computer program product, in a computer readable medium, comprising:

instructions for receiving an electronic message having a recipient at an address on a server;

instructions for identifying at least one ~~deliver~~ delivery attribute identifier in the electronic message for identifying at least one delivery attribute; and

instructions for generating a response, the response including validity information indicating whether the address is a valid address, and at least one delivery attribute value corresponding to the at least one delivery attribute, the at least one delivery attribute value including delivery information regarding the electronic message.
